

**RECEIVED**
FEB 24 2003
Technology Center 2100**MARKED VERSION TO SHOW CHANGES**

1. (Amended) A method of determining participants of a distributed operation in a distributed system, the method comprising the steps of:
registering in a name service participant data that identifies a plurality of participants that are participating in said distributed operation;
wherein said distributed operation is a unit of work involving said plurality of participants;
wherein said name service registers information received from clients and provides said information to clients that request the information, wherein said clients include one or more nodes different than a node on which said name service resides; and
causing a particular node of said one or more nodes that requires information about participants in said distributed operation to ~~retrieve~~ request said participant data from said name service.

2. (Unchanged) The method of Claim 1, wherein the step of causing a particular node includes causing said particular node to retrieve said participant data in response to said particular node performing deadlock detection.

3. (Unchanged) The method of Claim 1, wherein:
said distributed operation is a distributed transaction; and
the step of registering includes registering in a name service participant data that identifies which database servers of a plurality of database servers are participating in said distributed transaction.

4. (Unchanged) The method of Claim 1, further including the step of causing updates to said participant data to identify a new participant in said distributed operation.

1 5. (Unchanged) The method of Claim 4, wherein:

2 said distributed operation is a distributed database transaction being executed by a set of
3 processes coordinated by a coordinator process;
4 the method further includes the step of said coordinator process causing a new process on
5 a database server to participate in said distributed database transaction; and
6 the step of causing updates to said participant data includes said coordinator process
7 causing updates to said participant data in response to said new process
8 participating in said distributed database transaction.

1 6. (Unchanged) The method of Claim 1, wherein:

2 said distributed operation is a distributed database transaction;
3 the step of registering includes registering participant data that identifies which database
4 servers of a plurality of database servers are participating in said distributed
5 database transaction; and
6 the step of causing a particular node includes causing a particular node that requires
7 information about participants in said distributed database transaction to retrieve
8 said participant data from said name service.

1 7. (Unchanged) The method of Claim 1, wherein:

2 said distributed operation is a distributed database transaction;
3 the method further includes the step of assigning a transaction identifier to said
4 distributed database transaction;
5 the step of registering includes registering in said name service data that associates said
6 participant data with said transaction identifier; and
7 the step of causing a particular node includes causing a particular node to request from
8 said name service published data associated with said transaction identifier.

1 8. (Unchanged) The method of Claim 1, wherein the steps further include said name service
2 receiving a request from a first process to supply said participant data, wherein said name
3 service and said first process reside on said particular node.

1 9. (Unchanged) The method of Claim 8, wherein the step of causing a particular node
2 includes said name service retrieving said participant data from one or more data
3 structures residing on said particular node in response to receiving said request.

1 11. (Amended) A computer-readable medium carrying one or more sequences of one or more
2 instructions for determining participants of a distributed operation in a distributed system,
3 the one or more sequences of one or more instructions including instructions which, when
4 executed by one or more processors, cause the one or more processors to perform the
5 steps of:
6 registering in a name service participant data that identifies a plurality of participants that
7 are participating in said distributed operation;
8 wherein said distributed operation is a unit of work involving said plurality of
9 participants;
10 wherein said name service registers information received from clients and provides said
11 information to clients that request the information, wherein said clients include
12 one or more nodes different than a node on which said name service resides; and
13 causing a particular node of said one or more nodes that requires information about
14 participants in said distributed operation to ~~retrieve~~ request said participant data
15 from said name service.

1 12. (Unchanged) The computer-readable medium of Claim 11, wherein the step of causing a
2 particular node includes causing said particular node to retrieve said participant data in
3 response to said particular node performing deadlock detection.

1 13. (Unchanged) The computer-readable medium of Claim 11, wherein:
2 said distributed operation is a distributed transaction; and
3 the step of registering includes registering in a name service participant data that
4 identifies which database servers of a plurality of database servers are
5 participating in said distributed transaction.

1 14. (Unchanged) The computer-readable medium of Claim 11, further including the step of
2 causing updates to said participant data to identify a new participant in said distributed
3 operation.

1 15. (Unchanged) The computer-readable medium of Claim 14, wherein:
2 said distributed operation is a distributed database transaction being executed by a set of
3 processes coordinated by a coordinator process;
4 the computer-readable medium further includes sequences of instructions for performing
5 the step of said coordinator process causing a new process on a database server to
6 participate in said distributed database transaction; and
7 the step of causing updates to said participant data includes said coordinator process
8 causing updates to said participant data in response to said new process
9 participating in said distributed database transaction.

1 16. (Unchanged) The computer-readable medium of Claim 11, wherein:
2 said distributed operation is a distributed database transaction;

3 the step of registering includes registering participant data that identifies which database
4 servers of a plurality of database servers are participating in said distributed
5 database transaction; and

6 the step of causing a particular node includes causing a particular node that requires
7 information about participants in said distributed database transaction to retrieve
8 said participant data from said name service.

1 17. (Unchanged) The computer-readable medium of Claim 11, wherein:

2 said distributed operation is a distributed database transaction;

3 the steps further include the step of assigning a transaction identifier to said distributed
4 database transaction;

5 the step of registering includes registering in said name service data that associates said
6 participant data with said transaction identifier; and

7 the step of causing a particular node includes causing a particular node to request from
8 said name service published data associated with said transaction identifier.

1 18. (Unchanged) The computer-readable medium of Claim 11, wherein the steps further

2 include said name service receiving a request from a first process to supply said

3 participant data, wherein said name service and said first process reside on said particular
4 node.

1 19. (Unchanged) The computer-readable medium of Claim 18, wherein the step of causing a

2 particular node includes said name service retrieving said participant data from one or

3 more data structures residing on said particular node in response to receiving said request.
4

1 21. (New) The method of claim 1, wherein the step of registering includes registering for

2 each participant in said plurality of participants, data that identifies said each participant

3 in response to said each participant commencing participation in said distributed
4 transaction.